Montana Laboratory Sentinel



Updates from the MT Laboratory Services Bureau 800-821-7284 www.lab.hhs.mt.gov

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Public Health Concerns about Multi-Drug or Unusual Resistant Organisms

The Centers for Disease Control and Prevention (CDC) and the Montana Public Health Laboratory (MTPHL) are interested in tracking emerging resistance in bacteria and encourage all clinical laboratories to submit isolates with unusual antimicrobial susceptibility patterns. In the June 30, 2010 issue of Lab Sentinel, we asked for clinical laboratorians to refer any carbapenem resistant enteric isolates, especially if exposure

was in India or Pakistan. In addition to the MMWR report describing these isolates, CDC has become aware of four additional metallo- β -lactamase (MBL) producing strains of *Klebsiella* spp. in two U.S. states that contain non-NDM1 resistance genes. Given the importance of Enterobacteriaceae in healthcare-associated infections and the extensive antimicrobial resistance found in these strains, carbapenem-resistant Enterobacteriaeae (CRE) are an important public health problem.

Another resistant isolate of concern is vancomycin resistant or intermediate *Staphylococcus aureus* (VRSA or VISA). Vancomycin continues to be an important antimicrobial agent for treating infections caused by *S. aureus* strains that are resistant to oxacillin (MRSA) and other antimicrobial agents. The reduced susceptibility of VISA and VRSA strains to vancomycin leaves clinicians with relatively few therapeutic options for treating these infections. As of May 2010, there have been only 11 VRSA isolates confirmed in the United States. The CDC has developed an algorithm for testing *S. aureus* with vancomycin, highlighting the testing methodologies for detecting VISA/VRSA and the actions that should be taken, based on results. http://www.cdc.gov/ncidod/dhqp/ar visavrsa algo.html If VRSA is suspected or confirmed, please send the isolate to the MTPHL for confirmation. Because of exchange of genetic material from vancomycin-resistant enterococci (VRE) to methicillin-resistant *Staphylococcus auerus* (MRSA) in the emergence of VRSA, CDC is also asking clinical laboratories to save all VRE, VRSA and MRSA isolates from patients from whom a confirmed or suspected VRSA is isolated. Following confirmation of VRSA, CDC recommends that all three isolate types (i.e., VRE, MRSA, and VRSA) be shared with public health partners, including CDC, for further testing.

Drug resistant *Streptococcus pneumoniae* isolates are another public health concern. Over the last two decades resistant pneumococcal strains have challenged our ability to treat these common infections. Isolates of *S. pneumoniae* that are resistant to key agents – penicillin, macrolides or third generation cephalosporins – should be referred to the MTPHL as part of laboratory surveillance.

These unusual or multi-drug resistant organisms are considered to be reportable under the Montana DPHHS Communicable Disease Control Administrative Rules 37.114.203 REPORTABLE DISEASES AND CONDITIONS "An occurrence in a community or region of a case or cases of any communicable disease in the "Control of Communicable Diseases Manual, An Official Report of the American Public Health Association" with a frequency in excess of normal expectancy." There is no rule that states that isolates must be submitted to the MTPHL for confirmatory testing, but we are asking for your cooperation in referring suspect isolates. All referred testing is done free of charge to the health care facility and/or patient.

Laboratory surveillance for drug resistant organisms is essential in understanding resistance mechanisms, determining the extent of the problem, and designing interventions to stop the spread of these "bad bugs".

Report and submit the following organisms to the Montana Public Health Laboratory

- Carbapenem-resistant Enterobacteriaceae
- VISA/VRSA
- Drug resistant S. pneumoniae
- Bacteria with unusual susceptibility patterns

National Laboratory Training Network Presents

Packaging & Shipping Division 6.2 Materials

An Interactive Online Training Course

<u>Download the course flyer for full details</u>. (PDF) Register online.

Packaging and shipping Division 6.2 materials, such as patient specimens containing infectious materials and cultures, are regulated by US and international transport agencies. This intermediate-level online course, designed for individual study, is suitable for those seeking re-certification. Participants are provided with information useful for complying with regulations through use of instructional content and the opportunity to apply knowledge using realistic scenarios.

This course does not apply to individuals seeking initial certification.

Continuing Education Credits are available for this course. **Registration**: \$25.00 per person (payable to APHL) Register online at http://www.nltn.org/302-10.htm.

For additional program information, email ondemand@aphl.org.

WANTED: NEW LAB PROFESSIONALS

You will get no disagreement from lab professionals that interest in the profession is dwindling. The average age of the laboratory work force is 50 and more than 40 percent are within 10 years of retirement. The chair of the ASCP Council of Laboratory Professionals and the executive vice president of the American Society for Clinical Laboratory Science discuss these issues and the role that lab professionals will play in the future of health care. Read the full interview in the new issue of *Lab Focus* from The Joint Commission.

INNOVATIVE ACADEMIC PARTNERSHIP SAVES MEDICAL LABORATORY SCIENCE PROGRAM AT ARIZONA STATE UNIVERSITY

Two years ago, Arizona State University (ASU) was on the verge of closing its Medical Laboratory Science program, initially in response to projected cuts in funding from the state of Arizona. Community leaders, however, urged ASU administrators to find another solution because of the demand for more, not fewer, laboratory professionals in the heavily populated area. Instead, ASU has developed a partnership with Phoenix College, a community college, to reinvent the Medical Laboratory Sciences program, which opened on Aug. 19, 2010. Read more about the Arizona program reopening.



A National Comprehensive Assessment of TB Laboratory Services

APHL and CDC have developed the National TB Laboratory Services Survey to assess the capability and capacity of U.S. laboratories to provide quality TB diagnostic services. This survey is critical to identifying local and national gaps in TB testing capacity and developing appropriate interventions in the form of advocacy, training, funding and research.

The survey will be distributed on September 7, 2010 to all clinical, commercial and public health laboratories that provide TB testing services in the United States. The survey will help us better understand the TB laboratory network in Montana and the nation in order to identify ways to improve our current TB systems.

If you are interested in more information about this survey, you can contact Susie Zanto at szanto@mt.gov or 406-444-2839.

FDA Says Flu Vaccine Poses No Salmonella Threat

The <u>Wall Street Journal</u> (8/31, McKay) reports that some are worried that because flu vaccine is grown in chicken eggs that it may contain salmonella. The Journal cites the FDA and vaccine maker Sanofi-Aventis SA explaining that salmonella is not a danger from the vaccine because the eggs used are not from the same sources and are tested for disease. The vaccine is also tested for pathogens.

http://online.wsj.com/article/SB10001424052748703 369704575462051041922326.html

